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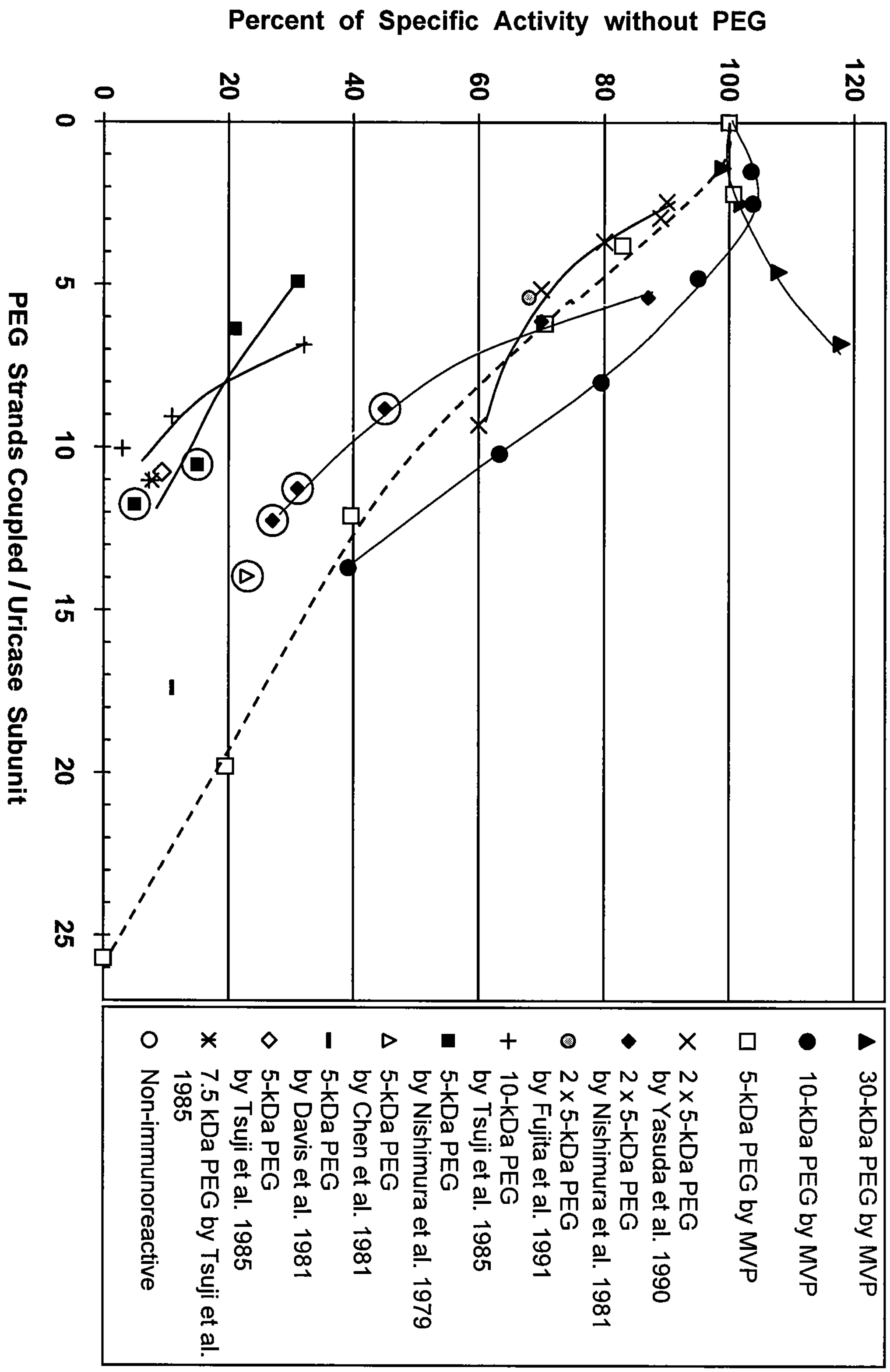

Figure 1A: Retention of Activity by PEGylated *Candida* Uricase

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Figure 1B: Retention of Activity by PEGylated *Candida* Uricase

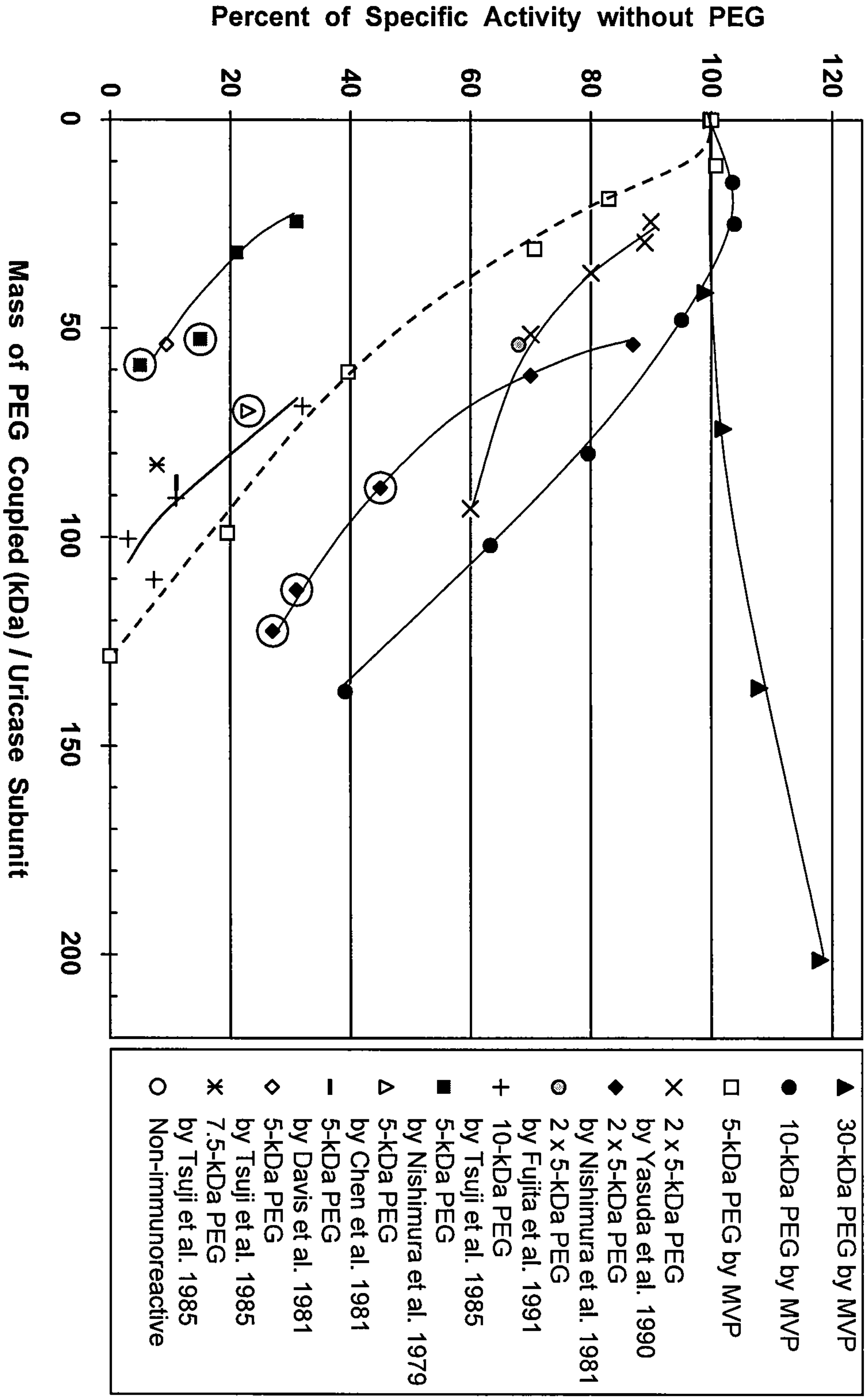

Figure 2A: **Retention of Activity by PEGylated Porcine Uricase**

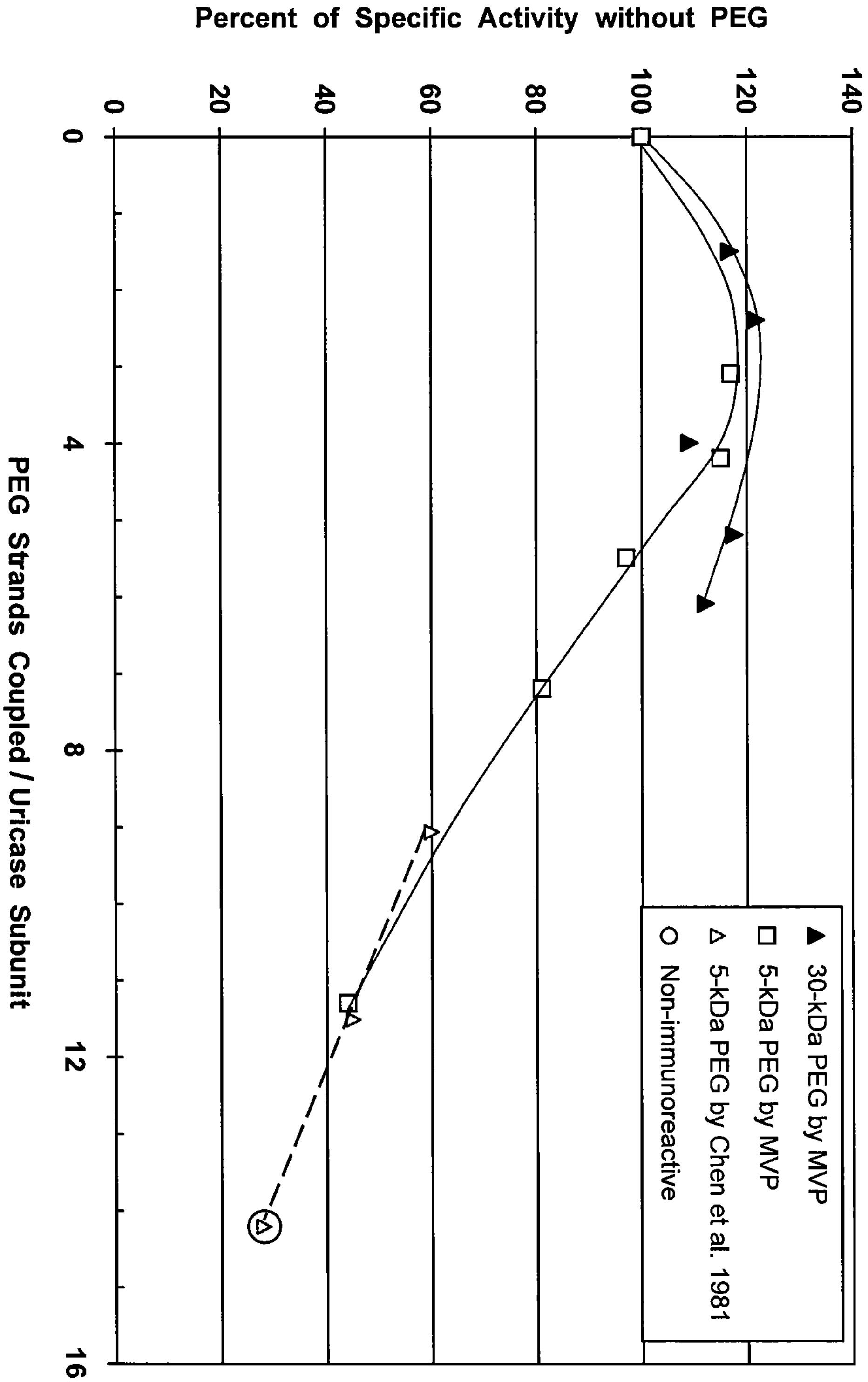

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Figure 2B: Retention of Activity by PEGylated Porcine Uricase

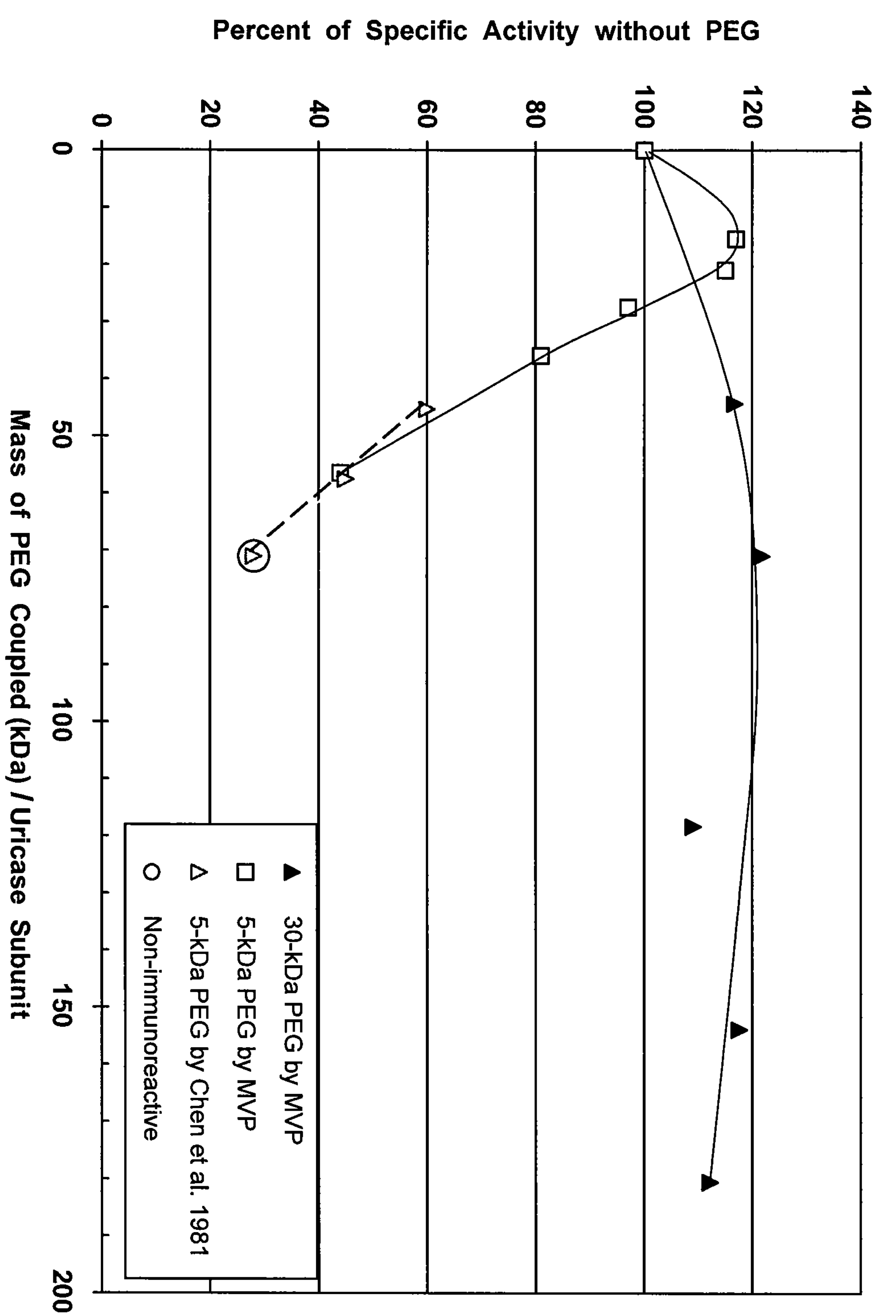
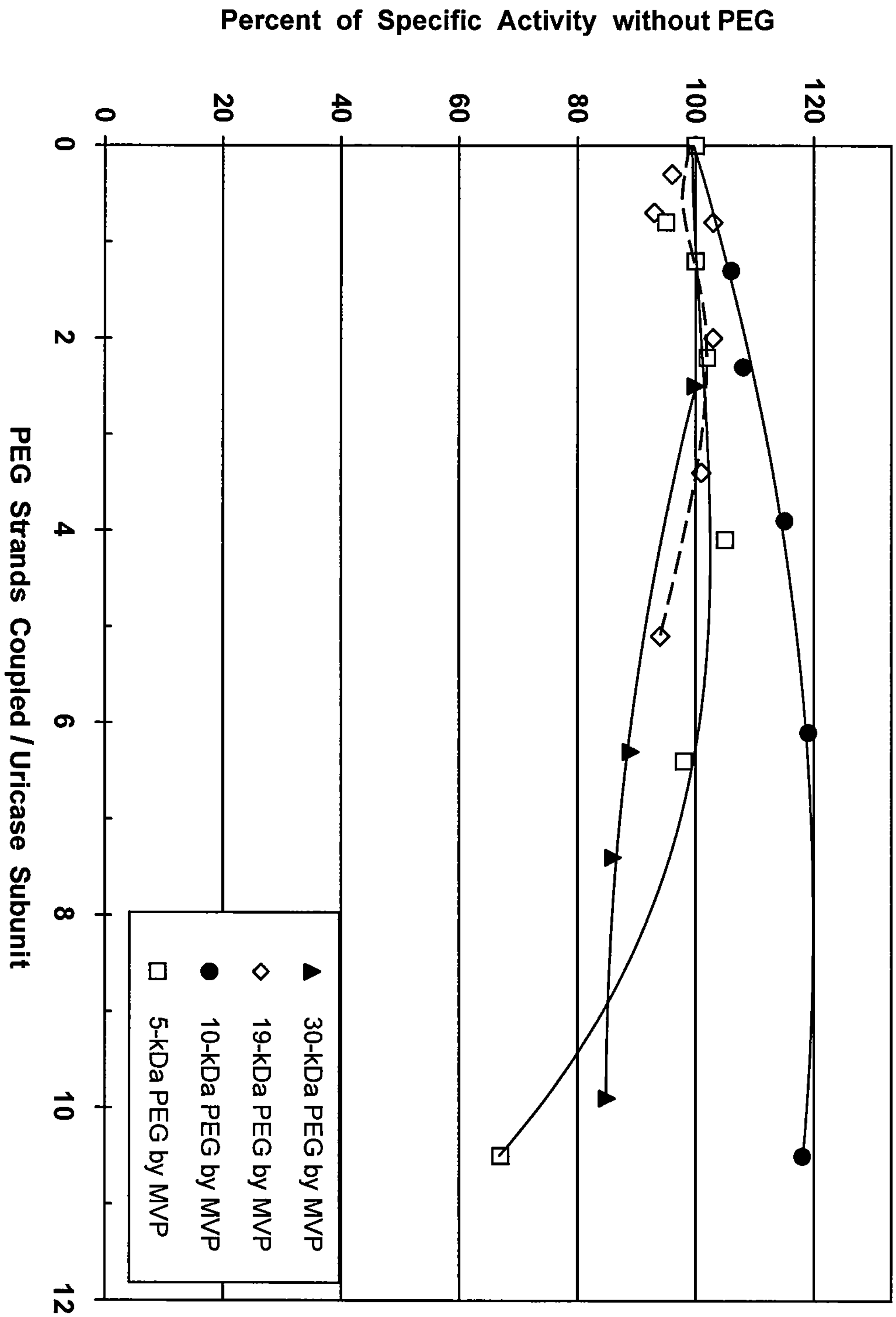


Figure 3A: Retention of Activity by PEGylated Pig-Baboon Chimeric Uricase



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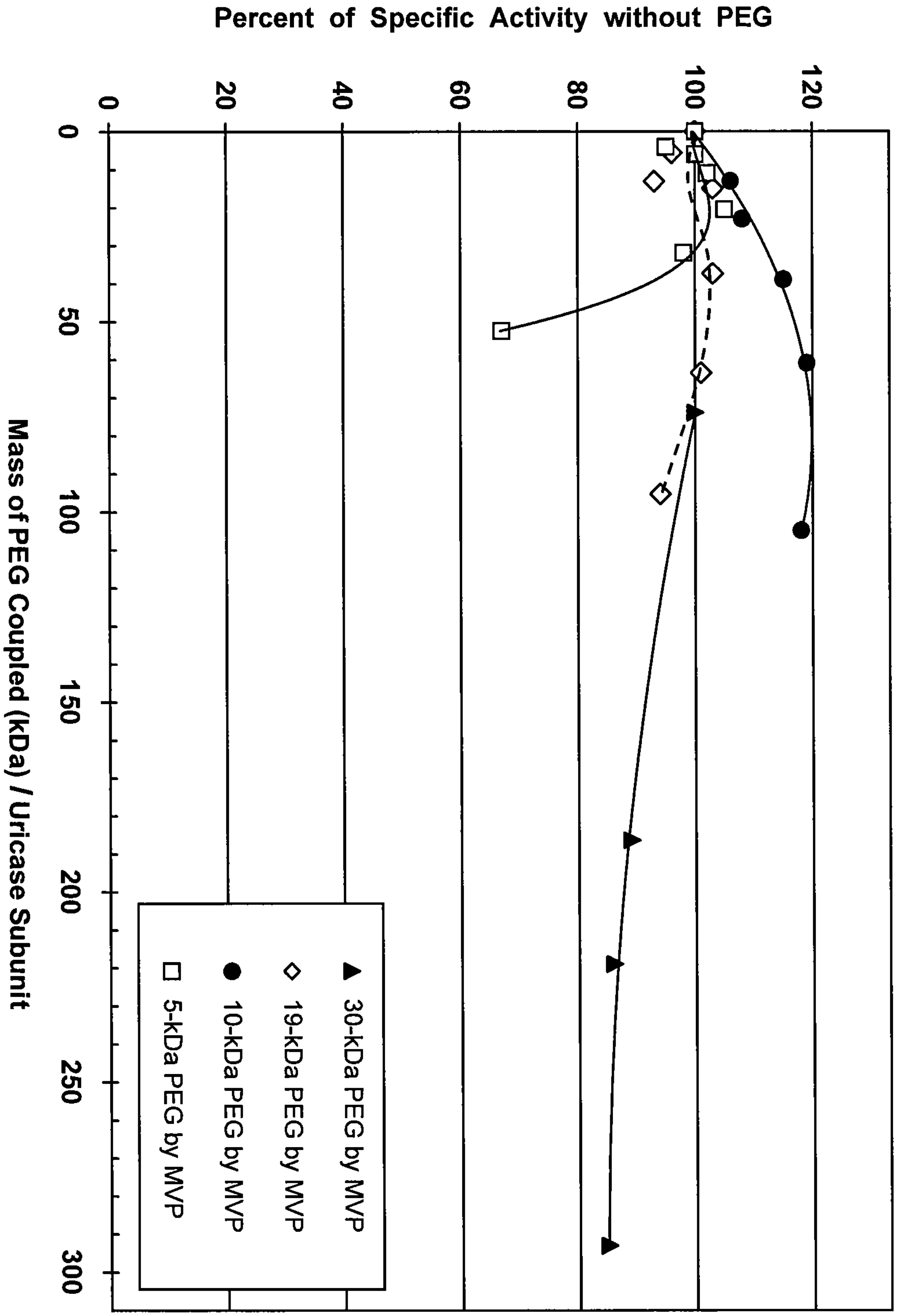

Figure 3B: Retention of Activity by PEGylated Pig-Baboon Chimeric Uricase

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Figure 4A: Retention of Activity by PEGylated Uricozyme® (*A. flavus* Uricase)

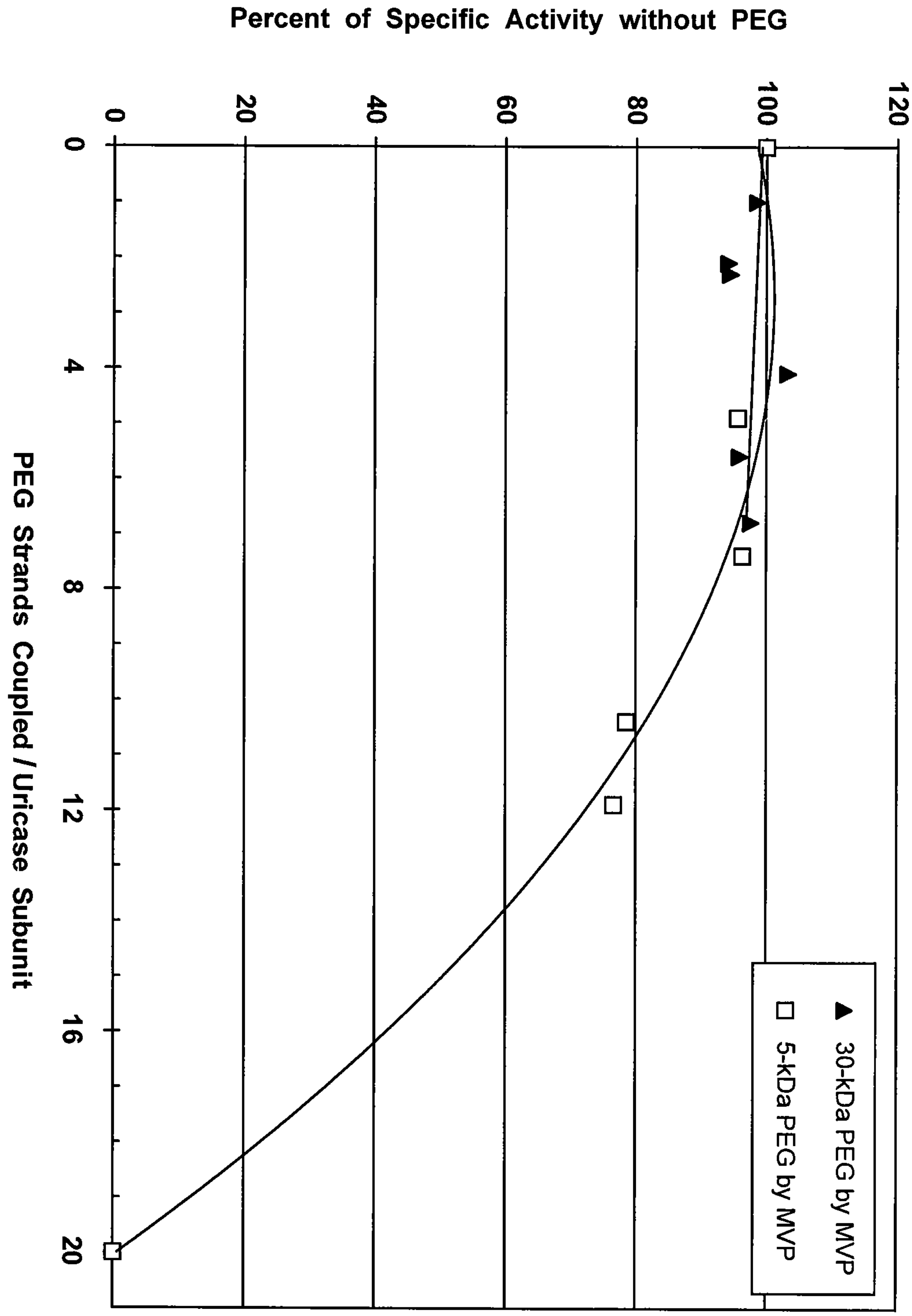

Figure 4B: Retention of Activity by PEGylated Uricozyme® (*A. flavus* Uricase)

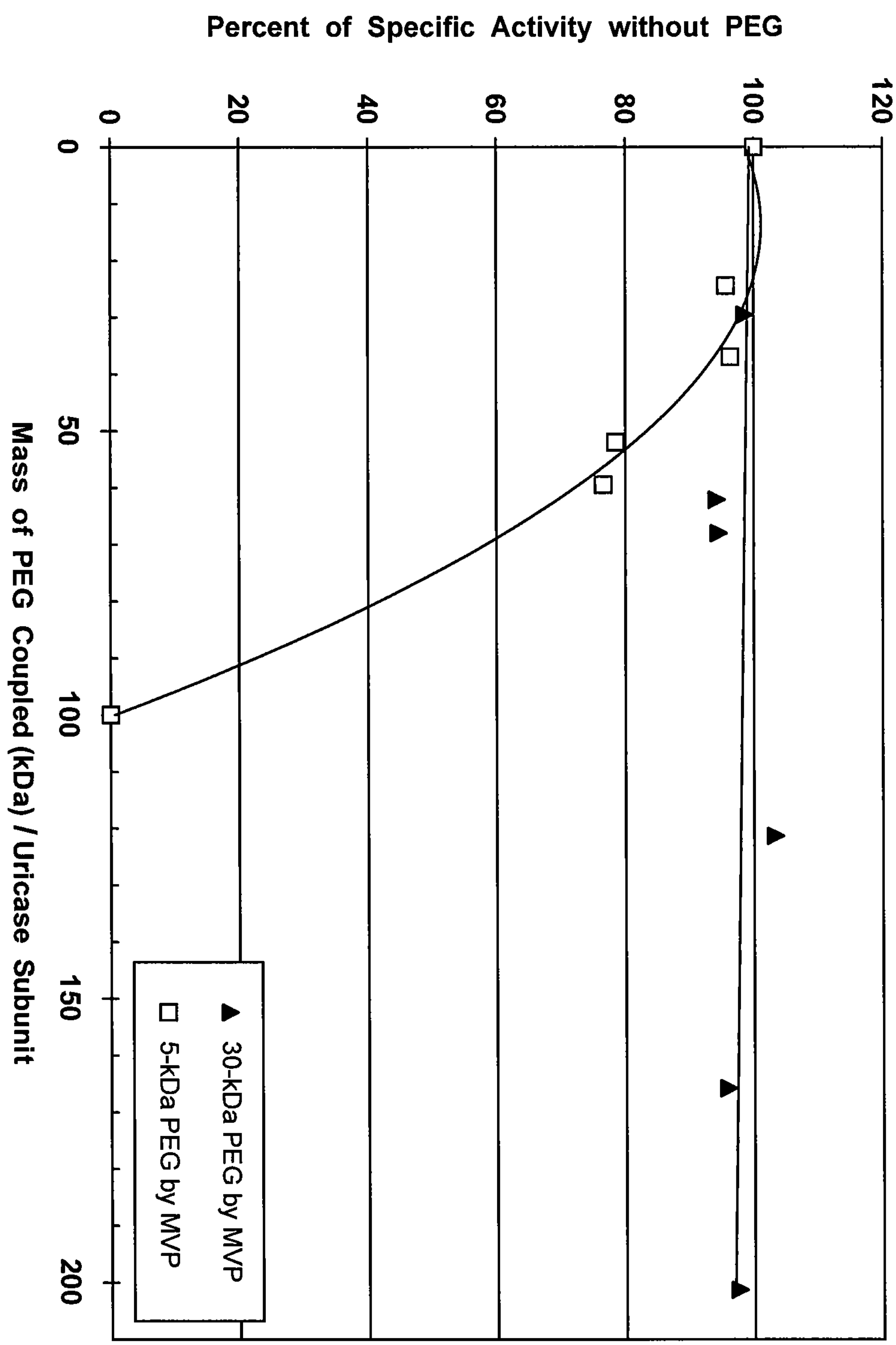

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Figure 5A: **Retention of Activity by PEGylated Soybean Uricase**

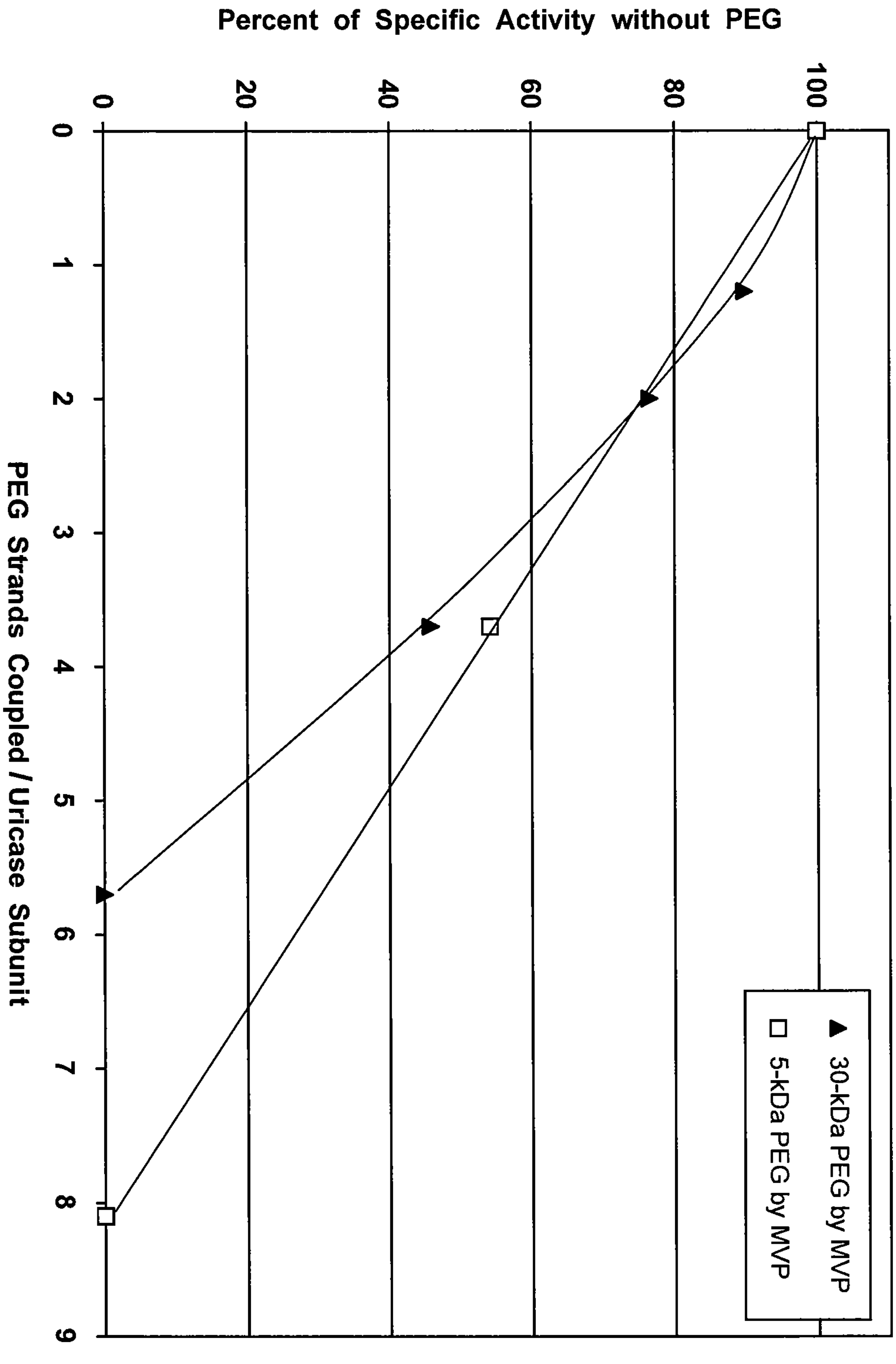

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Figure 5B: **Retention of Activity by PEGylated Soybean Uricase**

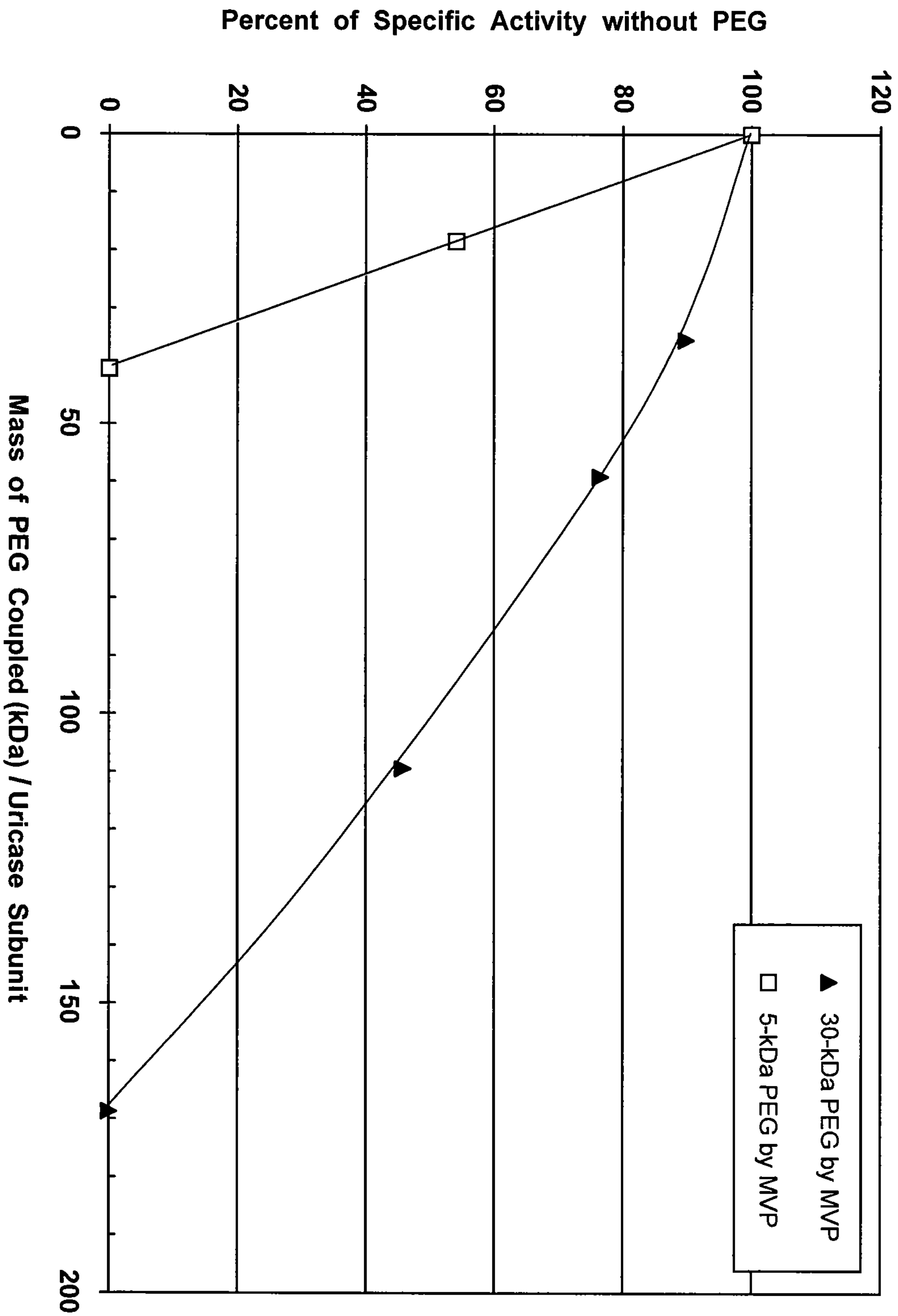

Figure 6: Deduced amino acid sequences of **P**ig-**B**aboon **C**himeric (**PBC**) uricase, PBC uricase that is truncated at the amino and carboxyl terminals (**PBC-NT-CT**) and **P**orcine uricase containing the mutations R291**K** and T301**S** (**PKS** uricase), compared with the porcine sequence (SEQ ID NO: 1) and the baboon sequence (SEQ ID NO: 2).

Porcine	MAHYRNDYKK	NDEVEFVRTG	YGKDMIKVLH	IQRDGKYHSI	40
PBC	*porcine sequence 1-225 →*				40
PBC-NT-CT		*porcine sequence 1-219 →*			34
PKS	*porcine sequence 1-288 →*				40
Baboon	MA**D**Y**H**N**N**YKK	NDE**L**EFVRTG	YGKDM**V**KVLH	IQRDGKYHSI	40
Porcine	KEVATSVQLT	LSSKKDYLHG	DNSDVIPTDT	IKNTVNVLAK	80
PBC	*porcine sequence →*				80
PBC-NT-CT	*porcine sequence →*				74
PKS	*porcine sequence →*				80
Baboon	KEVATSVQLT	LSSKKDYLHG	DNSD**I**IPTDT	IKNTV**H**VLAK	80
Porcine	FKGIKSIETF	AVTICEHFLS	SFKHVIRAQV	YVEEVPWKRF	120
PBC	*porcine sequence →*				120
PBC-NT-CT	*porcine sequence →*				114
PKS	*porcine sequence →*				120
Baboon	FKGIKSIE**A**F	**G**V**N**ICE**Y**FLS	SF**N**HVIRAQV	YVEE**I**PWKR**L**	120
Porcine	EKNGVKHVHA	FIYTPTGTHF	CEVEQIRNGP	PVIHSGIKDL	160
PBC	*porcine sequence →*				160
PBC-NT-CT	*porcine sequence →*				154
PKS	*porcine sequence →*				160
Baboon	EKNGVKHVHA	FI**H**TPTGTHF	CEVEQ**L**R**S**GP	PVIHSGIKDL	160
Porcine	KVLKTTQSGF	EGFIKDQFTT	LPEVKDRCFA	TQVYCKWRYH	200
PBC	*porcine sequence →*				200
PBC-NT-CT	*porcine sequence →*				194
PKS	*porcine sequence →*				200
Baboon	KVLKTTQSGF	EGFIKDQFTT	LPEVKDRCFA	TQVYCKWRYH	200
Porcine	QGRDVDFEAT	WDTVRSIVLQ	KFAGPYDKGE	YSPSVQKTLY	240
PBC	*porcine sequence*		→	*← baboon sequence*	240
PBC-NT-CT	*porcine sequence*		→	*← baboon sequence*	234
PKS	*porcine sequence →*				240
Baboon	QCRDVDFEAT	W**G**T**I**R**DL**VL**E**	KFAGPYDKGE	YSPSVQKTLY	240
Porcine	DIQVLTLGQV	PEIEDMEISL	PNIHYLNIDM	SKMGLINKEE	280
PBC	*baboon sequence →*				280
PBC-NT-CT	*baboon sequence →*				274
PKS	*porcine sequence →*				280
Baboon	DIQVL**S**L**SR**V	PEIEDMEISL	PNIHY**F**NIDM	SKMGLINKEE	280
Porcine	VLLPLDNPYG	RITGTVKRKL	TSRL	304	
PBC	*baboon sequence →*			304	
PBC-NT-CT	*baboon sequence →*			295	
PKS	*porcine* | *←*	*baboon*	→	304	
Baboon	VLLPLDNPYG	**K**ITGTVKRKL	**S**SRL	304	

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Figure 7: **Serum Uricase Activity 24 Hours after Each PEG-Uricase Injection, Relative to the First Injection**

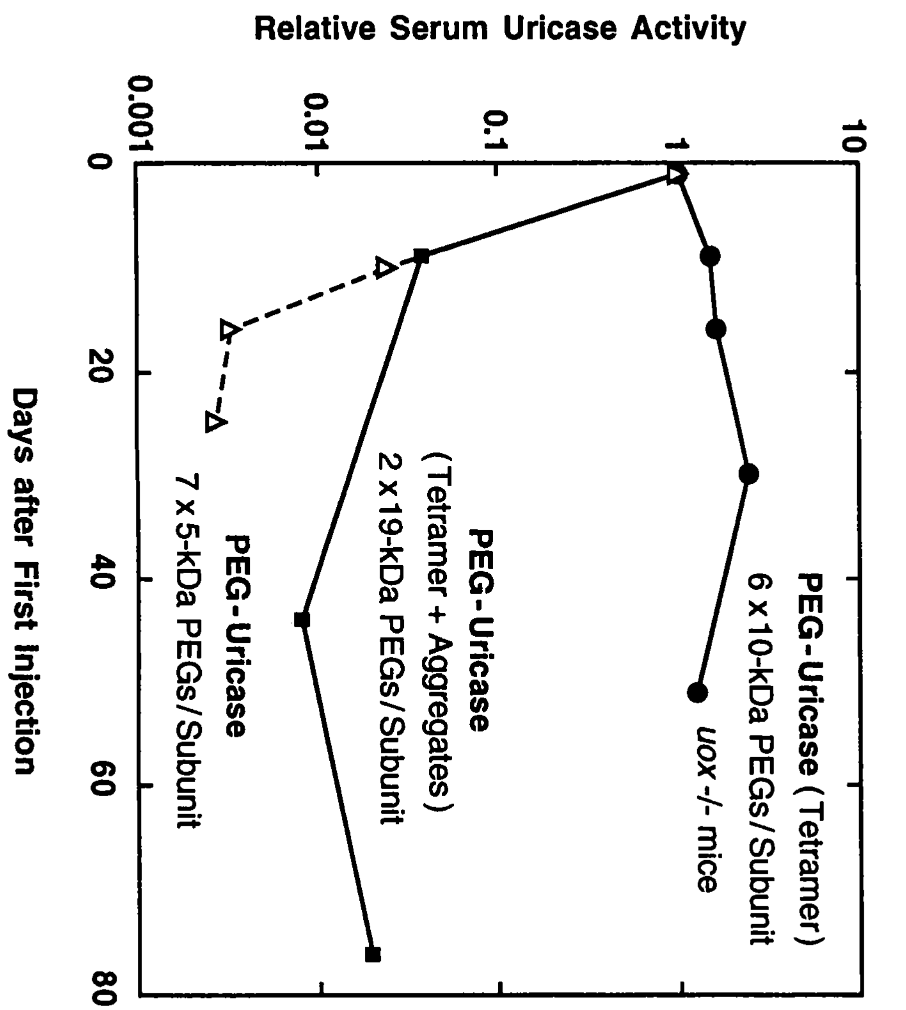

Figure 8: **Inverse Relationship between Serum PEG-Uricase Activity and Uric Acid Levels in the Serum and Urine of a Uricase-Deficient Mouse**

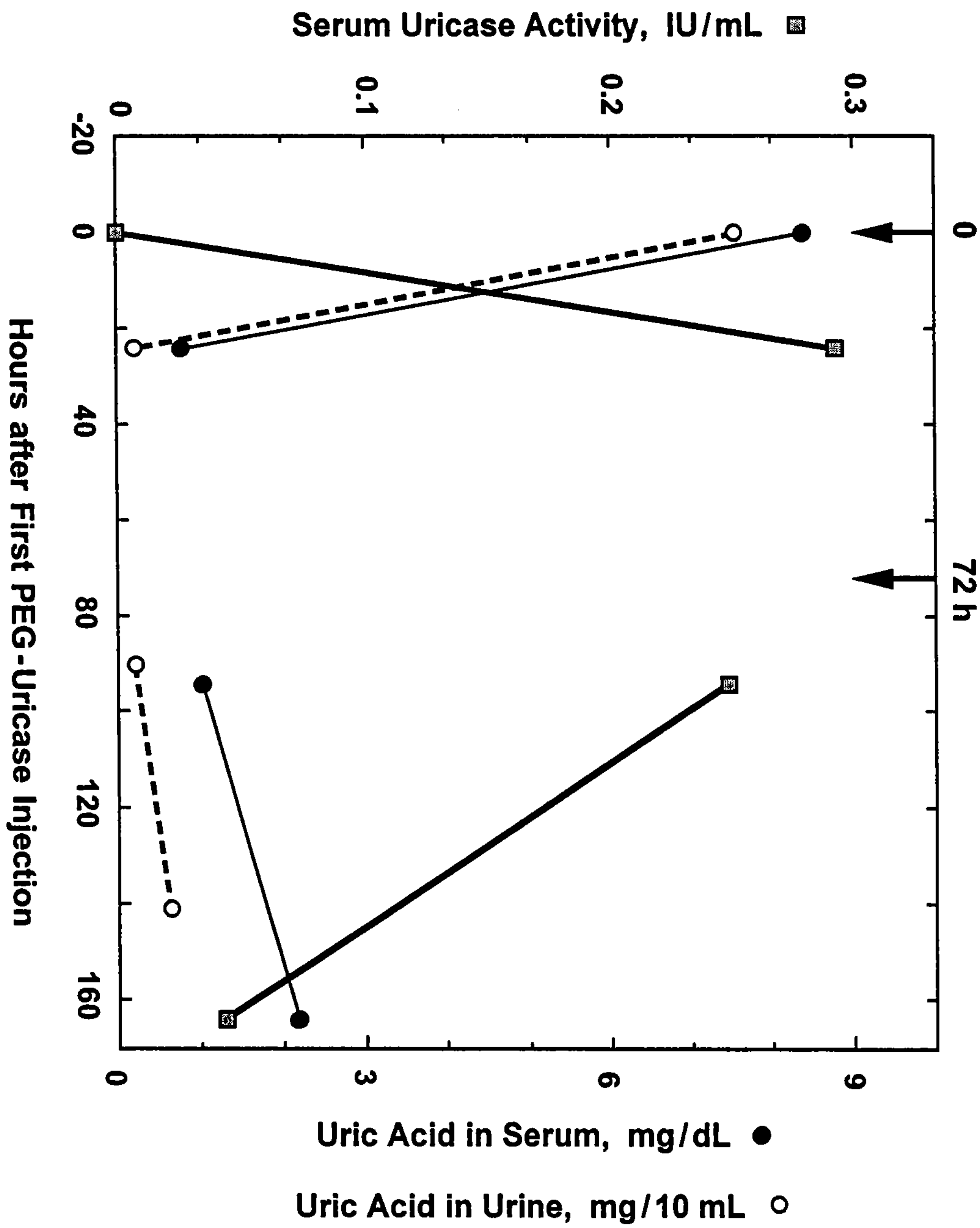

Figure 9: **Decreased Severity of Urine-Concentrating Defect in Uricase-Deficient Mice Treated with PEG-Uricase**

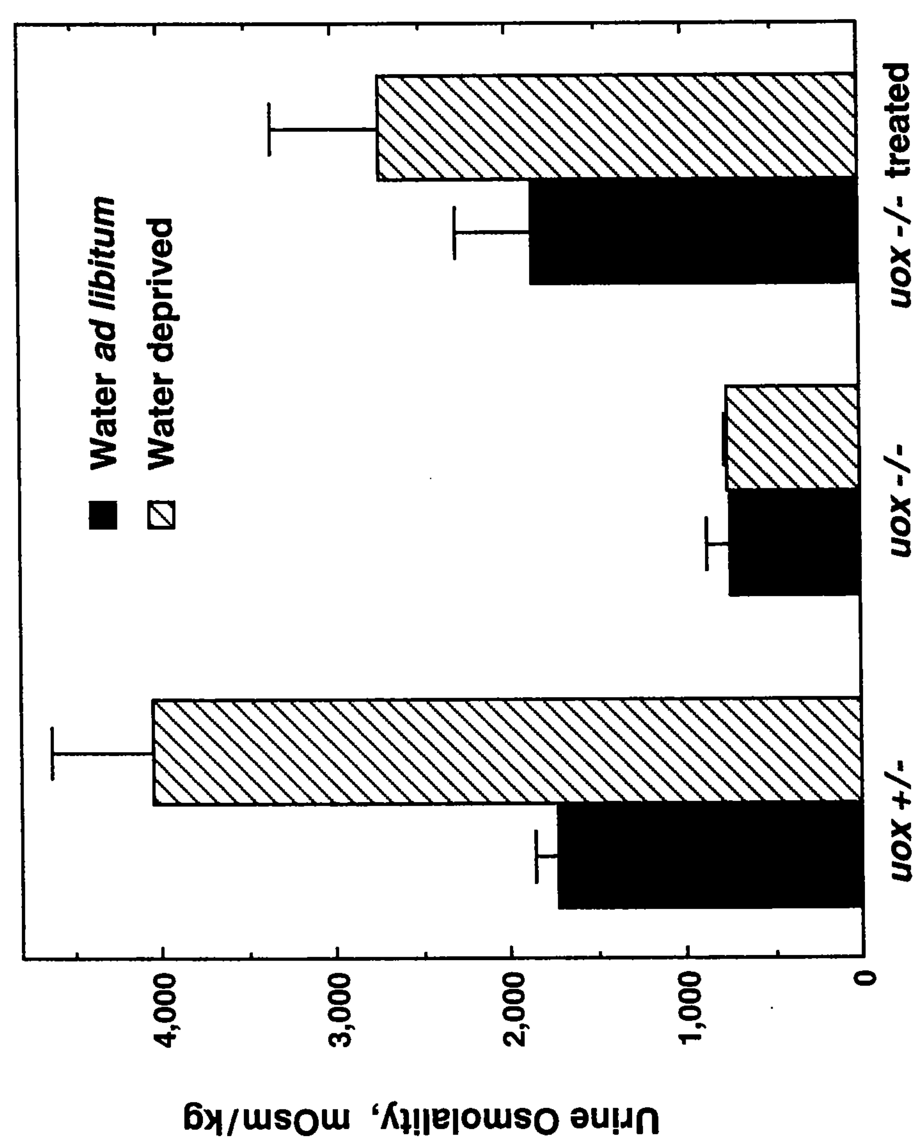

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Figure 10: **Decreased Severity of Nephrogenic Diabetes Insipidus in Uricase-Deficient Mice Treated with PEG-Uricase**

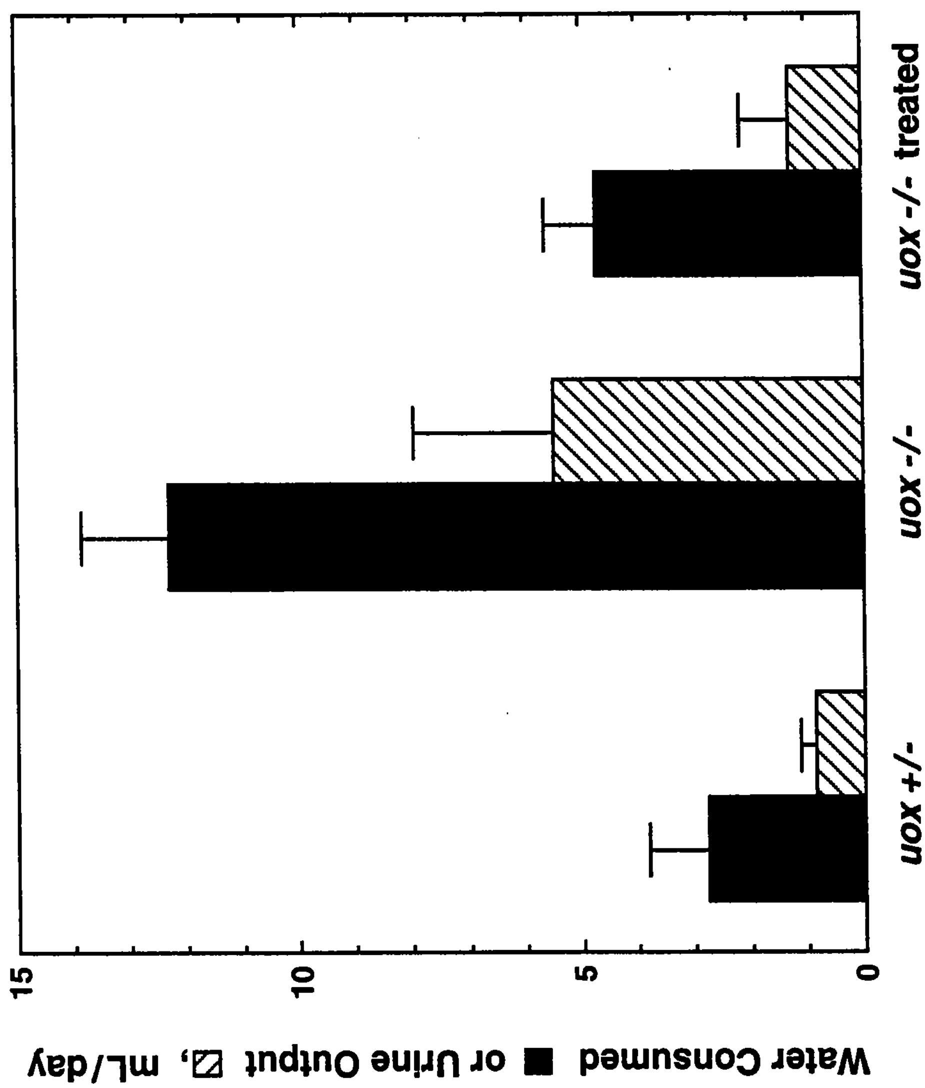


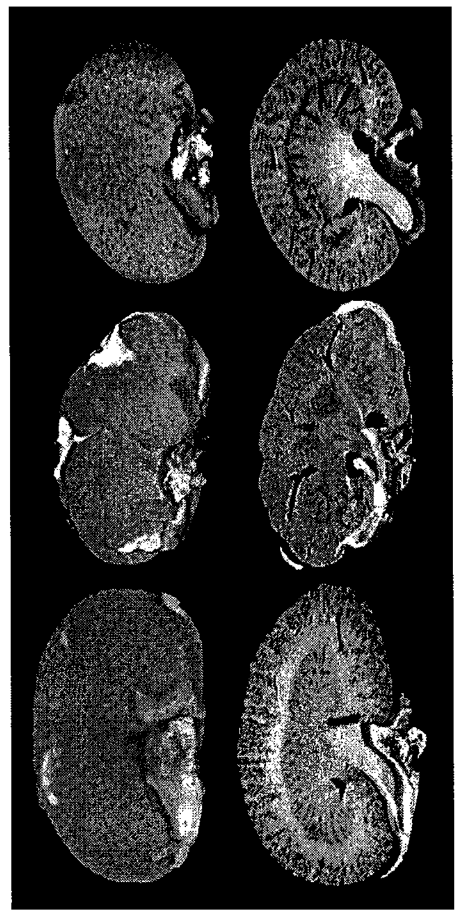
Figure 11:

Decreased Severity of Uric Acid-Induced Nephropathy after Treatment with PEG-Uricase, as Visualized by Magnetic Resonance Microscopy

Kidney of normal mouse

Kidney of untreated uricase knockout mouse

Kidney of PEG-uricase treated uricase knockout mouse



Surface Rendered

Coronal Slice